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REMARKS/ARGUMENTS

Claims 1-11 are pending in this application. By this Amendment, Applicant amends claim 8.

Applicant greatly appreciates the Examiner's indication that claims 1-4, 9 and 10 are allowed and that claim 8 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims. Applicant has amended claim 8 to be in independent form including all of the features of base claim 5. Accordingly, Applicant respectfully submits that claim 8 is allowable, as indicated by the Examiner.

The Examiner alleged that a reference to foreign priority application UK 0006576.6 "must be inserted in the first sentence of the specification of this application or in an application data sheet." This is clearly incorrect. The requirement to insert reference to prior application applies only to prior U.S. applications. There is absolutely no requirement to insert reference to a prior foreign application. Further, Applicant has perfected the claim to priority of UK 0006576.6 by filing a certified copy of same on May 30, 2001. Accordingly, Applicant respectfully submits that the application as originally filed fully complies with all requirements under 35 U.S.C. §§ 119 and 120.

Claims 5 and 7 were rejected under 35 U.S.C. § 102(e) as being anticipated by Xie et al. (U.S. 5,644,634). Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Xie et al. in view of Felder et al. (U.S. 6,370,244). Applicant notes that, although the Examiner did not include claim 11 in the description of the rejection over Xie et al. in view of Felder et al., since claim 11 is discussed in the body of this rejection, Applicant assumes that the Examiner intended to reject claim 11 along with claim 6 over Xie et al. in view of Felder et al. Applicant respectfully traverses these rejections.

Applicant's claim 5 recites:

"A multi-frequency tone detector comprising an analysis filter for detecting the tone energies of an input signal at a plurality of tone

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frequencies of interest and a decision logic block for detecting presence or absence of said tone frequencies of interest based on said detected tone energies, characterized in that **said analysis filter has a window size chosen such that adjacent ones of said tone frequencies of interest are located at spectral nulls of said filter.**" (emphasis added)

The Examiner alleged that Xie et al. teaches each and every feature recited in Applicant's claim 5, including allowing different window sizes for each bin, and "as such, each window size would be chosen so that the adjacent ones of said tone frequencies of interest are located at the spectral nulls of the filter." Applicant respectfully disagrees.

In contrast to the present claimed invention and the Examiner's allegations, Xie et al. teaches centering of the analysis filter at the desired frequency and choosing a window to detect this frequency accurately with, for example, a Goerzel algorithm. In other words, Xie focuses on the desired frequency to reduce the detection error K for that frequency, irrespective of other interfering signals. Xie et al. fails to teach or suggest anything at all about spectral nulls or window sizes of adjacent tone frequencies. Thus, Xie et al. clearly fails to teach or suggest "said analysis filter has a window size chosen such that adjacent ones of said tone frequencies of interest are located at spectral nulls of said filter" as recited in Applicant's claim 5.

Felder et al. was relied upon to allegedly teach a rectangular window size. However, Felder et al. clearly fails to teach or suggest "said analysis filter has a window size chosen such that adjacent ones of said tone frequencies of interest are located at spectral nulls of said filter" as recited in Applicant's claim 5. Thus, Applicant respectfully submits that Felder et al. fails to cure the deficiencies of Xie et al. described above.

Accordingly, Applicant respectfully submits that Xie et al. and Felder et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of method steps and features recited in claim 5 of the present application.

In view of the foregoing amendments and remarks, Applicant respectfully submits that Claim 5 is allowable. Claims 6, 7 and 11 depend upon claim 5, and are therefore allowable for at least the reasons that claim 5 is allowable. Claims 1-4 and 8-10 are

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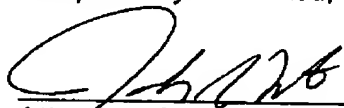
allowable as indicated by the Examiner.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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